

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for producing a pigment, comprising:

a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base material,
then

b) adding a titanium compound; and

c) adding an aluminum compound,

wherein no significant amount of zirconium compound is added to the aqueous suspension of
titanium dioxide base material.

2. (Original) The method of claim 1, further comprising:

d) adjusting the pH value of the suspension to a value of from 8 to 10.

3. (Original) The method of claim 1, wherein the added phosphorus compound is an inorganic
phosphorus compound.

4. (Original) The method of claim 3, wherein the inorganic phosphorus compound is selected
from the group consisting of alkali phosphates, ammonium phosphates, polyphosphates,
and phosphoric acid.

5. (Original) The method of claim 1, wherein the added phosphorus compound is 0.4 to 6.0%
by weight calculated as P_2O_5 , referred to TiO_2 base material in the suspension.

6. (Original) The method of claim 5, wherein the added phosphorus compound is 1.0 to 4.0%

2 by weight, calculated as P_2O_5 , referred to TiO_2 base material in the suspension .

1 7. (Original) The method of claim 6, wherein the added phosphorus compound is 1.6 to 2.8%
2 by weight, calculated as P_2O_5 , referred to TiO_2 base material in the suspension .

3 8. (Original) The method of claim 1, wherein the titanium compound added is a hydrolyzable
4 titanium compound.

1 9. (Original) The method of claim 8, wherein the titanium compound added is selected from the
2 group consisting of titanyl sulphate and titanyl chloride.

1 10. (Original) The method of claim 8, wherein the quantity of titanium compound added is 0.1
2 to 3.0% by weight, calculated as TiO_2 , referred to TiO_2 base material in the suspension.

1 11. (Original) The method of claim 10, wherein the quantity of titanium compound added is
2 0.1 to 1.5% by weight, referred to TiO_2 base material in the suspension.

1 12. (Original) The method of claim 11, wherein the quantity of titanium compound added is
2 0.1 to 1.0% by weight, calculated as TiO_2 , referred to TiO_2 base material in the
3 suspension.

1 13. (Original) The method of claim 1, wherein the quantity of titanium compound added is 0.1
2 to 1.0% by weight, calculated as TiO_2 , referred to TiO_2 base material in the suspension.

1 14. (Original) The method of claim 1, wherein the aluminum compound added is alkaline.

1 15. (Original) The method of claim 14, wherein the alkaline aluminum compound is selected
2 from the group consisting of sodium aluminate, alkaline aluminum chloride, and alkaline
3 aluminum nitrate.

- 1 16. (Original) The method of claim 14, further comprising
2 d) adjusting the pH value of the suspension to a value of from 8 to 10 after step c).
- 1 17. (Original) The method of claim 1, wherein the aluminum compound added is acidic.
- 1 18. (Original) The method of claim 17, further comprising:
2 d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
3 compound.
- 1 19. (Original) The method of claim 17, further comprising:
2 d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
3 compound in combination with a base.
- 4 20. (Original) The method of claim 1, wherein during the addition of the aluminum compound,
5 the pH value of the suspension is maintained constant in the range from 2 to 10 by the
6 simultaneous addition of a pH modifying compound.
- 1 21. (Original) The method of claim 20, wherein during the addition of the aluminum compound,
2 the pH value of the suspension is maintained constant in the range from 4 to 9 by the
3 simultaneous addition of a pH modifying compound.
- 4 22. (Original) The method of claim 21, wherein during the addition of the aluminum compound,
5 the pH value of the suspension is maintained constant in the range from 6 to 8 by the
6 simultaneous addition of a pH modifying compound.

1 23. (Original) The method of claim 1, wherein the total quantity of the aluminum compounds
2 added is 2.0 to 7.5% by weight, calculated as Al_2O_3 , referred to TiO_2 base material.

3 24. (Original) The method of claim 23, wherein the total quantity of the aluminum compounds
4 added is 3.5 to 7.5% by weight, calculated as Al_2O_3 , referred to TiO_2 base material.

1 25. (Original) The method of claim 1, further comprising

d) adding a magnesium compound.

1 26. (Original) The method of claim 25, wherein the magnesium compound added is selected
2 from the group consisting of magnesium sulphate and magnesium chloride.

1 27. (Original) The method of claim 25, wherein the quantity of magnesium compound added is
2 0.1 to 1.0% by weight, calculated as MgO , referred to TiO_2 base material in the
3 suspension.

1 28. (Original) The method of claim 27, wherein the quantity of magnesium compound added is
2 0.2 to 0.5% by weight, calculated as MgO , referred to TiO_2 base material in the
3 suspension.

1 29. (Original) The method of claim 25, further comprising

2 e) treating the pigment with an added material in order to influence the final pH value of the
3 suspension wherein the final pH value of the pigment is controlled by the pH and the
4 quantity of the added material.

1 30. (Original) The method of claim 29, where the added material is a nitrate compound.

1 31. (Original) The method of claim 30, where the finished pigment contains up to 1.0% by

2 weight NO₃.

1 32. (canceled) The method of claim 29, further comprising;

2 incorporating the pigment produced into a decorative laminating paper.

1 33. (canceled) The method of claim 29, further comprising;

2 incorporating the pigment produced into a resin.

1 34. (Original) The method of claim 1, where the titanium dioxide base material is milled before
2 step a).

1 35. (Original) The method of claim 34, where the titanium dioxide base material is wet-milled
2 and where a dispersant is added during milling.

1 36. (canceled) The method of claim 1, further comprising;

2 incorporating the pigment produced into a decorative laminating paper.

1 37. (canceled) The method of claim 1, further comprising;

2 incorporating the pigment produced into a resin.

1 38. (canceled) The method of claim 25, further comprising;

2 incorporating the pigment produced into a decorative laminating paper.

1 39. (canceled) The method of claim 25, further comprising;

2 incorporating the pigment produced into a resin.

1 ~~42:~~ 40. (currently amended) A material, comprising;

2 a titanium dioxide pigment material; the titanium dioxide comprising ~~a very large plurality of~~
3 TiO_2 particles, each particle having a surface;

4 phosphorus containing material attached to the surface of each particle;

5 titanium containing material additional to the titanium dioxide material of the surface attached to
6 the phosphorus containing material; and

7 aluminum containing material attached to the titanium containing material additional to the
8 titanium dioxide material of the surface.

1 ~~43:~~ 41. (currently amended) The material of claim ~~42~~ 40, further comprising;

2 magnesium containing material attached to the aluminum containing material.

1 ~~44:~~ 42. (currently amended) The material of claim ~~42~~ 40, further comprising;

2 nitrate containing material attached to the aluminum containing material.

1 ~~45:~~ 43. (currently amended) The material of claim ~~42~~ 40, further comprising;

2 nitrate and magnesium containing material attached to the aluminum containing material.

1 ~~46:~~ 44. (currently amended) The material of claim ~~42~~ 40, wherein the resultant particles
2 contain an insignificant amount of zirconium.

1 47: 45. (currently amended) The material of claim 42 40 , wherein the titanium dioxide
2 pigment material is incorporated into further comprising a decorative laminated paper.

1 48: 46. (canceled) The material of claim 42 40 further comprising a resin.

1 47. (new) The material of claim 41, wherein the titanium dioxide pigment material is
2 incorporated into a decorative laminated paper.

1 48. (new) The material of claim 42, wherein the titanium dioxide pigment material is
2 incorporated into a decorative laminated paper.

1 49. (new) The material of claim 43, wherein the titanium dioxide pigment material is
2 incorporated into a decorative laminated paper.

1 50. (new) The material of claim 44, wherein the titanium dioxide pigment material is
2 incorporated into a decorative laminated paper.

1 51. (new) A method for producing a pigment, comprising:

2 a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base material,
3 wherein the added phosphorus compound is 1.6 to 2.8% by weight, calculated as P_2O_5 ,
4 referred to TiO_2 base material in the suspension; then

5 b) adding a titanium compound; and

6 c) adding an aluminum compound.

1 52. (new) A method for producing a pigment, comprising:

a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base material,
then

b) adding a titanium compound; and

c) adding an acidic aluminum compound.

53. (new) The method of claim 52, further comprising:

d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
compound.

54. (new) The method of claim 52, further comprising:

d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
compound in combination with a base.

55. (new) A method for producing a pigment, comprising:

a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base material,
then

b) adding a titanium compound; and

c) adding an aluminum compound, and

d) adding a magnesium compound.

56. (new) The method of claim 55, wherein the magnesium compound added is selected from

2 the group consisting of magnesium sulphate and magnesium chloride.

1 57. (new) The method of claim 55, wherein the quantity of magnesium compound added is 0.1
2 to 1.0% by weight, calculated as MgO, referred to TiO₂ base material in the suspension.

1 58. (new) The method of claim 57, wherein the quantity of magnesium compound added is 0.2
2 to 0.5% by weight, calculated as MgO, referred to TiO₂ base material in the suspension.

1 59. (new) The method of claim 55, further comprising

2 e) treating the pigment with an added material in order to influence the final pH value of the
3 suspension wherein the final pH value of the pigment is controlled by the pH and the
4 quantity of the added material.

1 60. (new) The method of claim 59, where the added material is a nitrate compound.

1 61. (New) The method of claim 60, where the finished pigment contains up to 1.0% by weight
2 NO₃.